Wisconsin Department of Transportation

ENVIRONMENTAL EVALUATION OF FACILITIES DEVELOPMENT ACTIONS

Project I.D. 1166-02-00	**Funding Source** ☐ **State Only** ☒ **Federal**
Project Termini USH 51/STH 29 **Section** Mallard Lane to West Bridge Street **County** Marathon	**Federal Number** _____ **Estimated Project Cost (Include R/W Acquisition)** $109,366,339

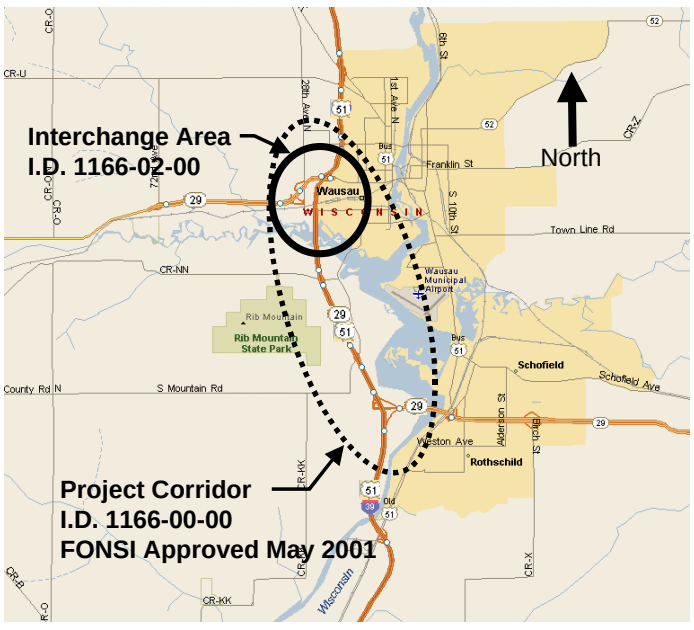
It is determined, after review of the comments from the public, and coordination with other agencies, that this action would not significantly affect the quality of the human environment. This document is a ☐ **Finding of No Significant Impact (FONSI).**	☒ **Environmental Assessment (EA) No Significant Impacts Indicated by Initial Assessment** ☐ **Environmental Assessment (EA) EIS Required** ☐ **Environmental Report (2-ER)**

X _____ _____ **(Title)**_____ **(Date)**	X _____ 8/30/02 **(Title)** Project Manager **(Date)**
X _____ _____ **(Title)**_____ **(Date)**	X _____ 8/30/02 **(Title)** Hwy 51/29 Corridor Coordinator **(Date)**
X_____ _____ (☐ **District,** ☐ **Aero,** ☐**Rails & Harbors)** **(Date)**	X _____ 8/30/02 (☒ District, ☐ Aero, ☐Rails & Harbors) **(Date)**
X _____ _____ **(Director, Bureau of Environment)** **(Date)**	X _____ 10-1-02 **(Director, Bureau of Environment)** **(Date)**
X _____ _____ (☐ **FHWA** ☐ **FAA** ☐ **FTA** ☐ **FRA** **(Date)**	_____ 10-21-02 ☒ FHWA ☐ FAA ☐ FTA ☐ FRA **(Date)**

1) Description of Proposed Action (Attach project location map and other appropriate graphics).

The proposed action is to reconstruct a system of four interchanges into a new system to system free-flow interchange configuration at the northerly junction of USH 51 and STH 29. This interchange area is located within the solid black circle in the adjacent figure. This interchange area is part of the overall proposed improvements to the I-39/USH 51/STH 29 corridor which are described in a FONSI for project 1166-00-00, dated May 2001, and shown by the dotted line in the adjacent figure. A configuration for this interchange area was included in that FONSI. It has since been determined that the interchange configuration shown in that FONSI did minimize environmental impacts and relocations, but that it did not efficiently or completely solve the transportation needs of the area.

To develop an interchange system that better meets the goals and objectives of the project, WisDOT conducted a Value Planning/Value Engineering (VP/VE)Study on the interchange area. This study was a series of four, one-day



Map of Project Area

workshops that brought together representatives from WisDOT, local governments, local business owners, governmental agencies, and consulting engineers involved with the project. The purpose for the VP/VE Study was to develop and evaluate interchange alternatives jointly with the major stakeholders of this facility and select an option that best meets the transportation needs and goals of the project. These needs and goals were identified as part of the study. The results of the VP/VE Study were submitted to WisDOT in a report in November 2001. The selected option provided the best balance between the transportation needs, environmental impacts, and other identified goals of the project. The complete process and results of the study are summarized in Item 3 of this section of the document.

This EA is being prepared to address changes in alignment and potential changes in environmental impacts between the "no-build" alternative (Alternative A), the alternative described in the original FONSI (Alternative B), and the new preferred interchange from the VP/VE Study (Alternative C). This EA will address the crossing of the Big Rib River and the area north of the Big Rib River that is being affected by the new interchange configuration. The portion of the project corridor south of the Big Rib River is essentially unchanged and covered under the original FONSI.

The proposed interchange configuration will relieve congestion and alleviate safety problems that are present at the existing USH 51/STH 29/STH 52 diamond interchange and on the local road system. The existing interchanges at Sherman Street, STH 52, 28th Avenue, and Bridge Street will be reconstructed to continue to provide access to the local road system. The new interchange configuration will necessitate the reconstruction of local streets including Sherman Street, 28th Avenue, Stewart Avenue, STH 52, Bridge Street, and other roadways within the Wausau Hospital/Wausau Insurance campus. The limits of the proposed interchange improvements begin at Mallard Lane, just south of the structures that cross the Big Rib River and end just north of the Bridge Street interchange. The westerly limit of the project on STH 29 is approximately one mile west of 28th Avenue. A detailed map of the proposed interchange configuration from the VP/VE Study (Alternative 4R) is attached as Exhibit 2.

The purchase of right-of-way is required for the proposed action. Most of the new right-of-way is presently used for commercial purposes. Relocations are also required as part of the right-of-way acquisition.

2. Purpose and need of proposed action. Include description of existing facilities, abutting facilities, and how the action links into the overall transportation system. When appropriate, show that commitment for future work is not being made without evaluation, and that viable alternatives in a larger framework are not being unduly foreclosed.

I-39/USH 51 is one of the main north-south routes in Wisconsin. With it's termini in Louisiana and Wisconsin, USH 51 crosses the states of Mississippi, Tennessee, Kentucky, and Illinois thus linking the Wausau Area to the rest of Wisconsin as well as the rest of the southern United States. I-39 begins in central Illinois and ends at the southerly USH 51/STH 29 system interchange. USH 51 is designed to function as a long haul automobile and truck carrier and is part of both the National Highway System and Wisconsin's Corridors 2020 backbone highway system.

STH 29 is a main east-west highway in Wisconsin that runs from Green Bay to Elk Mound linking eastern Wisconsin to I-94, the Minneapolis/St. Paul area, and the rest of the western United States. STH 29 is also part of both the National Highway System and Wisconsin's Corridors 2020 backbone highway system. STH 29 is a four-lane expressway with high speed free flow interchanges at all major highways except USH 51 in the Wausau area. Because of the high volume of traffic on STH 29, the importance the STH 29, and the inadequacies of the current interchanges, the proposed improvements are needed.

In the Wausau area, USH 51 and STH 29 run concurrently and serve local area traffic as well as the through regional traffic. These highways join each other by means of a system interchange at the southerly junction and a diamond interchange at the northerly junction. Existing USH 51 is a four-lane divided freeway. There are two travel lanes in the northbound direction and two for southbound traffic. These lanes are separated by a grass median. Access to the local system is accomplished by diamond interchanges at CTH N, CTH NN, STH 29/STH 52, and Bridge Street. There is a half diamond interchange at Sherman Avenue. Existing and proposed typical sections are attached in Exhibit 3.

The existing diamond interchange configuration at the northerly connection of USH 51and STH 29 is geometrically deficient to handle the existing traffic volumes during peak travel hours. During both the AM and PM peak hours, the interchange operates below Level of Service (LOS) D. Current traffic volumes on USH 51 south of the interchange exceed 50,000 ADT. Volumes north of the interchange on USH 51 exceed 28,000 ADT. West of the interchange on STH 29, volumes exceed 20,000 ADT. In the existing configuration, these volumes will grow to approximately 82,000, 46,000, and 33,000 ADT respectively for the year 2030. Without significant improvements such as a system to system type interchange, the existing diamond interchange LOS will continue to decline to LOS F and the overall operation will become unacceptable.

As part of the VP/VE Study, the planning team developed needs specific to the interchange area. They included the need to relieve the traffic congestion caused by the large number of vehicles and geometric deficiencies of the existing diamond interchange, improve the overall safety of the roadway, make the interchange compatible with the local road system, eliminate the only signalized intersection on STH 29 between Green Bay and I-94, improve the operational characteristics of the local road system, and provide better mobility across the USH 51/STH 29 corridor for the local road system. If these needs are not met, the area may

begin to suffer economically because of the difficulty and delay experienced by motorists while traveling between destinations.

The planning team also identified how the purpose of the project is to address the needs listed above. The means to accomplish this include:

- Provide a free flow movement between USH 51and STH 29
- Design to meet interstate standards for possible future jurisdictional transfer
- Design for ease of use by providing adequate weave distances and informational signage
- Increase traffic capacity to meet the long term (50 year) demands of the system
- Provide basic lane continuity of two lanes for through movement of through STH 29 traffic
- Keep ramp speeds associated with convergence within 10 mph of the mainline design speeds
- Provide a basic lane number of two lanes in both directions for USH 51 north of the interchange
- Provide access and connectivity to local streets, particularly Sherman Street, Stewart Avenue, and roads in the area of the Wausau Hospital/Insurance campus
- Provide a "gateway" to downtown Wausau
- Minimize environmental impacts
- Minimize impacts to businesses in the interchange area
- Improve access to the area northwest of the interchange
- Provide safe accommodations for pedestrians and bicyclists on local streets within the interchange area
- Provide for future maintenance considerations

In addition to the many operational needs of the project, there are several physical needs as well. Much of the existing pavement and many of the structures will reach the end of their useful life over the next 10 to 15 years. When these structures would be repaired or replaced, it would require rebuilding the new structures to meet current standards. To meet these new standards, additional vertical and horizontal clearances would be required. To achieve these standards, roadway and structure approach work would be substantial. Structures need to be lengthened to provide room for additional lanes and pedestrian facilities on the local roadways. The interruptions to traffic due to construction would be frequent thus reducing the capacity of the highway and potentially increasing delay and incidents.

As discussed in the original FONSI, the local units of government, local agencies, various state agencies, and general public are in favor of this project. The project is also consistent with the Local Arterial Circulation Plan (LACP) that was developed by the Metropolitan Planning Organization (MPO) to address the deficiencies within the current local roadway network and connect portions of the system network to support the "Balanced Growth" Concept adopted in the Wausau Metropolitan Area Long-Range Transportation Plan (LRTP).

By approving the original FONSI for the rest of the corridor, improvements will be made to USH 51/STH 29 to improve the roadway. If the interchange configuration approved with the FONSI is constructed, operational problems will develop, therefore requiring more improvements to be made. The proposed interchange needs to be consistent and compatible with the rest of the proposed system improvements. The purpose and need section of the original FONSI identifies that the needs of the corridor, which includes this interchange area, are based on the recommendations of the LRTP and the Needs Assessment Study (NAS).

3. Summary of the alternatives considered and if they are not proposed for adoption, why not. (Identify which, if any, of the alternatives is the preferred alternative.)

Alternative A – No Build

The no-build alternative does not alleviate any of the operational problems of the interchange area. If no geometric improvements are made, the overall LOS of the existing interchange system will reach LOS F in a short time due to the rapidly increasing number of vehicles. The local road system associated with the four interchanges will also experience a decline in LOS. This congestion and delay will continue to increase until the system fails (LOS F). The congestion and delay will also deter motorists from this area and ultimately affect the economic viability. With rising traffic numbers and no geometric improvements, there is the potential for more incidents.

The no-build alternative does not address the physical problems associated with the interchange configurations. The pavement and structures are nearing the end of their service life. If not replaced, the maintenance and repairs to these items will increase. Not only will the cost of these repairs be high, the delay and congestion caused during the repairs will reduce the overall capacity of the roadway. This could lead to more safety problems.

The no-build alternative is not consistent with the MPO's LRTP. The no-build alternative does not address the land use issues or transportation needs outlined in the LRTP. This alternative also does not address the issues discussed in the LACP.

For the reasons listed above the no-build alternative is not proposed for adoption.

Alternative B – Approved FONSI Alignment

This alternative was described in the approved FONSI for project 1166-00-00 in May 2001. A drawing of this alternative is shown in

Exhibit 4. In this alternative USH 51 remains on its current alignment. STH 52 is realigned to connect with Stewart Avenue to provide a more direct route into the city. The STH 29 loop ramps are replaced with system to system free-flow ramps in the northwest quadrant of the interchange. Access to the hospital and insurance complex is achieved through a new connection with an expanded 24th Street. The Sherman Street and Bridge Street interchanges remain at the existing locations but are expanded to provide adequate capacity for increasing traffic volumes.

This alternative appears to be environmentally acceptable in that it minimizes wetland impacts, avoids the hazardous material site in the STH 29 loop ramp, has minimal right-of-way acquisition, and limits commercial relocations. There are residential relocations with this alternative. Alternatives 1 and 3 have no residential relocations. However, with this environmentally acceptable look come several operational problems and several needs discussed in Item 2 of this document that are not met. To meet these needs would require more impacts to all of the items listed previously. The operational problems and needs not met include but are not limited to:

- The system to system ramps provide free flow movements and provide lane continuity with two-lanes of traffic for STH 29, but they do not meet interstate standards and desired design speed. To make the ramps meet standards and desired design speed would require several more residential relocations and severely impact the neighborhood in the northwest portion of the interchange. These ramps increase the noise level in the neighborhood located northwest of the interchange.
- The geometric configuration of the STH 29 ramps are somewhat long and indirect. This could lead to driver confusion.
- System to system ramps also have ramps from the local system exiting and entering onto them. This creates short weave distances on single lane ramps which is less than desirable.
- Access to the local roadway system is fragmented and indirect for the following reasons
    - Northbound USH 51 traffic can only exit the roadway at Sherman Street and Bridge Street. Northbound vehicles wanting to go downtown Wausau have to exit at the Sherman Street ramp long before they expect to at the Stewart Street location. This traffic will use 24th Street to get to the local system.
    - Entrance and exit ramps to and from STH 29 are located in separate locations. Driver expectations are to exit and enter a roadway at or near the same location. These fragmented intersections and the signage required to direct motorists could lead to driver confusion.
    - Vehicles entering northbound USH 51, westbound STH 29 and exiting southbound USH 51 all must go through a single intersection with 24th Street that is now carrying all northbound USH 51 traffic that wishes to go to the hospital/insurance complex. In addition to enter the local system they must go through another intersection at 24th Street and Stewart Avenue. From an operations view this is less than desirable.

This alternative is not recommended because it does not provide a balance between the environmental and operational impacts.

Alternative C – Value Planning/Value Engineering Study (Alternative 4R)

The original approved FONSI recommended Alternative B for the interchange area. Alternative B does limit relocations and minimizes environmental impacts, but does not solve all of the operational problems associated with the existing interchange. Therefore, the VP/VE Study was conducted to develop a new interchange configuration alternative.

The planning team began by developing the needs for the interchange area. The criteria required to meet these needs were also selected. To develop initial alternatives, the planning team was divided into several teams and asked to draw interchange configurations they felt met the developed needs criteria. These initial alternatives were drawn without regards to geometric limitations, environmental concerns, or political and personal agendas of the team members. This process revealed thirty-two alternatives. Because of similarities between several of the alternatives, they were sorted, combined, and reduced to eight options. These eight alternatives were refined by WisDOT to meet engineering design requirements. The planning team evaluated these eight options and determined that three of them, Alternatives VP/VE 1, VP/VE 5, and VP/VE 6 were not acceptable for various reasons. Therefore, Alternatives VP/VE 2, VP/VE 3, VP/VE 4, VP/VE 7, and VP/VE 8 were selected to proceed into a final evaluation. These five VP/VE Study alternatives are shown in Exhibit 4.

A matrix evaluation technique was used to evaluate these five alternatives. This matrix evaluation was comprised of performance criteria (9 items), and acceptability criteria (10 items), developed by the planning team. These criteria were given a weight of importance on a scale of 1 to 10 with 10 being the highest. Each alternative was rated individually on how it met each of the criteria on a scale of 1 to 10. The rating given by the team was multiplied by the importance factor for each criteria and then averaged to obtain an overall score for each alternative. From this process, Alternatives VP/VE 2, VP/VE 4, and VP/VE 7 emerged as the highest rated alternatives and are taken forward for evaluation. These alternatives are described below.

Alternative VP/VE 2

Alternative VP/VE 2 replaces the current diamond interchange that exists between USH 51 and STH 29 at STH 52 with a system to system free-flow interchange for STH 29 traffic to and from USH 51.

The USH 51 alignment is shifted to the west of the existing corridor with a 60 mph curve from Sherman Street to STH 52. The existing corridor is converted to a local arterial that carries traffic destined to the local commercial area, downtown Wausau, and the insurance/hospital employment center in the northwest quadrant of the interchange. Because the south STH 52 ramps are eliminated with this alternative, a substantial amount of mainline traffic is redirected to the Sherman Street interchange ramps.

A separated collector distributor road (CD), from the mainline provided between Bridge Street and STH 52 in the north and south direction eliminates weaving from the mainline USH 51. In the northbound direction, the CD road exits the mainline USH 51 as part of the STH 52 off-ramp and rejoins the mainline north of Bridge Street. In the southbound direction, the CD road exits from the mainline north of Bridge Street and rejoins the mainline south of STH 52. Since the southbound CD also carries traffic to both STH 52 and Bridge Street, special mainline signing is required to inform drivers of the early exit ramp. An auxiliary lane is provided along the CD road in both directions for local traffic driving only between STH 52 and Bridge Street.

Alternative VP/VE 2 installs a connection from west Stewart Avenue and STH 52 to STH 29. Direct access to 28th Avenue is eliminated for eastbound STH 29 travelers.

Alternative VP/VE 4

In Alternative VP/VE 4, USH 51 follows the existing route, but a system to system free-flow interchange connecting directly with STH 29 is added. In this interchange configuration, eastbound STH 29 to southbound USH 51 and northbound USH 51 to westbound STH 29 are connected by two-lane ramps. Eastbound STH 29 to northbound USH 51 and southbound USH 51 to westbound STH 29 are connected by one-lane ramps.

The existing STH 52 diamond interchange is maintained, yet STH 29 traffic does not have access to it. STH 29's loop ramps connecting to 28th Avenue are removed and both ramps connect directly to STH 52. Access to STH 29 westbound from employment centers south of Bridge Street is via the west STH 52/Stewart Avenue connection.

In the south portion of the corridor, traffic to and from STH 29 has a two-lane exit. The Sherman Street exit and on-ramp connect directly to the STH 29 ramps. The STH 29 eastbound to northbound movement has a left exit/entrance to USH 51. Drivers from STH 29 who want to exit onto Bridge Street would weave across two to three lanes of USH 51mainline traffic.

Alternative VP/VE 7

Alternative VP/VE 7 is similar to Alternative VP/VE 4 except for the way that STH 29 connects to north USH 51. In Alternative VP/VE 7, these ramps are moved farther to the north in an effort to minimize business impacts. Alternative VP/VE 7 also introduces CD roads between the Sherman Street interchange to just beyond the Bridge Street interchange.

USH 51 follows the existing route R/W in Alternative VP/VE 7. A STH 29 free-flow interchange is introduced between the Sherman Street and STH 52 interchanges. The existing STH 52 diamond interchange is maintained, yet STH 29's loop ramps onto 28th Avenue are eliminated and replaced with a direct connection onto STH 52. This connection provides access to employment centers in the northwest quadrant from and to the east. The elimination/replacement of the loop ramps on 28th Avenue also will encourage the use of the STH 52 interchange as an access to these employment centers.

Alternative VP/VE 7 provides a one-lane CD road between Bridge Street and Sherman Street in both the north and south directions, to remove weaving from the mainline USH 51. An auxiliary lane is provided along the CD in both directions between Bridge Street and STH 52. In the southbound direction, this auxiliary lane is carried forward until the STH 29 westbound exit. In the northbound direction, a one-lane CD splits from the mainline after the Sherman Street exit carrying traffic to and from STH 52 and Bridge Street here, as in Alternative 3, STH 29 eastbound to USH 51 northbound traffic merges with the mainline USH 51. Therefore this traffic does not have access to Bridge Street. In the southbound direction, a single-lane CD splits from the mainline before the Bridge Street exit carrying traffic to Bridge Street, STH 52, and STH 29 westbound. The southbound CD carrying traffic from Bridge Street joins the mainline after the split to STH 29 westbound. In the south portion of the corridor, traffic to and from STH 29 and Sherman St has a single exit and entrance to the mainline USH 51. Signage will be needed to inform drivers to use the CD exits to access local interchanges.

Alternatives VP/VE 2, VP/VE 4, and VP/VE 7 underwent preliminary engineering and traffic modeling procedures to determine the overall effectiveness and feasibility. From this analysis Alternative VP/VE 2 was dismissed for the following

reasons:

- Geometric challenges and driver safety issues were of great concern by the designers. Long bridges on curves and at ramp merges, horizontal and vertical curves hiding upcoming traffic weaving and merges, and difficulty in signing exits were the main objections to this alternative.
- Alternative VP/VE 2 forced a large volume of traffic to exit/enter at the Sherman Street interchange ramps and at new at-grade intersections at Stewart Avenue and STH 52.
- Alternative VP/VE 2 would require the relocation of an electrical substation that feeds a substantial portion of Central Wisconsin. This relocation is costly and must be staged over several years, possibly delaying the project.
- Alternative VP/VE 2's costs are higher than the costs for Alternatives VP/VE 4 and VP/VE 7.
- Alternative VP/VE 2 travels through an area once occupied by a steel fabricator. Therefore, Alternative VP/VE 2 may carry unanticipated costs associated with contaminated soil cleanup.
- Alternative VP/VE 2 has more impacts on a high quality wetland area.
- Alternative VP/VE 2 increased the noise levels to the neighborhood in the northwest quadrant.

Alternative VP/VE 4R (Preferred Alternative)

Alternatives VP/VE 4 and VP/VE 7 were presented at a Public Informational Meeting (PIM) and to local officials for comment. Using the comments, the CMT continued working with Alternatives VP/VE 4 and VP/VE 7 to develop the most appropriate series of interchanges for this portion of the corridor. In the spring of 2002 the CMT announced their recommendation for the interchange. The recommended alternative, Alternative VP/VE 4R, is a combination of Alternatives VP/VE 4 and VP/VE 7. A drawing of this alternative is shown in Exhibit 2.

In Alternative VP/VE 4R USH 51 follows the existing route and right-of-way. A free-flow interchange connecting directly with STH 29 is added. In this free-flow interchange, STH 29 is connected to the south with two-lane ramps and connected to the north with one-lane ramps. The Sherman Street on-ramp connects directly to the STH 29 ramp.

The existing STH 52 interchange is maintained, yet STH 29 traffic does not have access to it. STH 29's loop ramps connecting to 28th Avenue are removed. Instead, the STH 29 eastbound off-ramp and westbound on-ramp

connect directly to an extended STH 52 at Stewart Avenue.

West Bridge Street is realigned to connect more directly with the hospital complex. This connection improves traffic flow and mobility into this area. The profile of USH 51 has been lowered through this interchange to allow for the current profile of West Bridge Street to be flattened. This less extreme profile will improve safety on the roadway and at the interchange intersections.

Alternative VP/VE 4R is being recommended for the following reasons:

- Traffic models show that Alternative VP/VE 4R operates at an acceptable LOS beyond the design year of 2030. Some minor ramp modifications at the STH 52 and Bridge Street interchanges may be needed in the future however current design considerations will allow for these changes to be made with minimal interruptions.
- All entrance and exit ramps are right hand merges. This reduces driver confusion and improves the overall safety of the roadway.
- The configuration and location of the northbound USH 51 to westbound STH 29 and eastbound STH 29 to southbound USH 51 ramps avoid high quality wetland areas. The need to expand the existing structures over the Big Rib River by several traffic lanes has wetland impacts but they are far less than Alternative 2 and eliminate the fragmentation caused by other alignments.
- Alternative VP/VE 4R has lower construction costs.
- Alternative VP/VE 4R keeps USH 51 in it's existing corridor therefore alleviating the difficulty of relocating the electrical substation and Wausau Steel.
- Preliminary hazardous materials investigations show that this alternative minimizes the number of sites.
- Alternative VP/VE 4R balances the socio-economic impacts with the environmental impacts.
- Alternative VP/VE 4R minimizes noise impacts to the neighborhood in the northwest quadrant.

4. In general terms, briefly discuss the construction and operational energy requirements and conservation potential of the various alternatives under consideration. Indicate whether the savings in operational energy are greater than the energy required to construct the facility.

The existing system provides a base line for energy requirements of this system. In the no-build situation, the energy requirements of the system will continue to grow because of the congestion and inefficient movement of traffic. The delay caused in the system will cause substantial energy requirements because of the increased amount of time required to reach destinations. All of the build alternatives provide relief for this congestion and are designed to provide more efficient traffic operations beyond the year 2030.

Even though alignments vary considerably for the different alternatives, the energy requirements will be similar to each other. The lengths of the various routes and operational characteristics are similar enough to each other that energy requirements will not noticeably differ between the build alternatives.

Construction energy for the project will be substantial due to the size and complexity of the interchange. However, over time the energy savings between the no-build and build alternative will be enough to offset construction energy requirements and thus, in the long term, result in a net savings in energy usage.

5. Describe existing land use (attach land use maps if available

a. Land use in immediate area.

The land use in the immediate area consists primarily of retail/commercial and industrial property. There is some residential property in the northwest portion of the project and some recreational, mainly the Big Rib River, on the southern end of the project.

b. Land use in area surrounding project area.

Land use in the area surrounding the project consists of a mixture of residential, retail/commercial, industrial, agricultural, recreational land. Because of the steep topography of the Wausau area many of the outlying areas are wooded slopes. Much is in paper company, recreational land (ski hills) or DNR ownership. More level areas are typical of the developed City's, Villages, and Towns. Recently there has been more residential development in the outlying areas. Stormwater concerns have emerged because of the clearing, paving, and other impervious area additions to the area. Typically the substantial aboveground biomass of wooded areas and sandy porous soils have facilitated infiltration. Wetland or lowland areas are usually confined to the drainageways and floodplain areas not suitable for development.

6. Briefly identify adopted plans for the area and discuss whether the proposed action is compatible with the plan. (For example, the following may be considered: Regional Planning Commission Plans, Transportation Improvement Program, State Transportation Improvement Plan, Local zoning and land use plans, DOT Storm Water Management Plans, Others.)

The approved FONSI identified the following documents developed by local governments:

- Town of Kronenwetter Land Use Plan (1978)
- City of Wausau Land Use Plan (1983)
- City of Mosinee Comprehensive Plan (1988)
- Town of Kronenwetter Community Development Plan Update (1988)
- Town of Rib Mountain Land Use Plan (1989)
- City of Wausau 2015 Proposed Sewer Service Area Plan (1996)
- Town of Main Land Use Plan (1996)
- Long Range Transportation Plan for the Wausau Metropolitan Area (1996)
- Major Amendment for the Wausau Urban Area Sewer Service Plan (1998)
- Village of Weston/Town of Weston Land Use Plan 1998-2008 (1998)
- Town of Stettin Land Use Plan 1998-2017 (1998)
- Local Arterial Circulation Plan (2000)

Alternative C (VP/VE 4R), although different than Alternative B from the approved FONSI, is still compatible with these documents. This project is also compatible with WisDOT's Corridor 2020 program.

7. Early coordination with Agencies.

a. Intra-Agency Coordination

i) Bureau of Aeronautics

☐ **No - Coordination is not required. Project is not located within 2 miles (3.22 kilometers) of a public or military use airport nor would the project change the horizontal or vertical alignment of a transportation facility located within 6.44 kilometers (4 miles) of a public use or military airport.**

☒ **Yes - Coordination has been completed and project effects have been addressed. Explain:**
The proposed interchange improvements are within 2 miles of the Wausau Municipal Airport. Coordination with the Bureau of Aeronautics and the airport manager was initiated for the approved FONSI. Follow up coordination with BOA is documented in a phone conversation record attached as Exhibit 5. If during final design the 100:1 airspace is violated or any construction item such as a structure or light pole reaches more than 200 feet in the air a Federal Aviation Administration Form 7460 "Notice of Proposed Construction or Alteration" has to be submitted. If a contractor's crane is over 200 feet tall the contractor will have to submit the Form 7460 before construction. This should be noted in the contract Special Provisions.

ii) District Office Real Estate Section

☐ **No - Coordination is not required because no inhabited houses or active businesses will be acquired.**

☒ **Yes - Coordination has been completed. Project effects and relocation assistance have been addressed. Conceptual Stage Relocation Plan attached as Exhibit 6**.

b.Interagency Coordination

Agency coordination was initiated under the FONSI. Coordination with agencies has been ongoing since that time. Some agencies participated in the VP/VE study. Letters describing this EA and proposed action were sent to the necessary agencies in an effort to continue coordination and solicit responses for this document. A Cap Environmental Document that summarizes the impacts of all the corridor related projects, including the McCleary Bridge, CTH N, Hummingbird Road, and West Arterial, was also sent to the agencies to make them aware of the cumulative environmental impacts.

STATE AGENCY	COORDINATION Attached? Y-Yes N-No	COMMENTS Explain or give results. If no correspondence is attached to this document, indicate when coordination with the agency was initiated and, if available, when coordination was completed
Agriculture DATCP	N	The majority of the lands required for the project are non-agricultural vacant or developed lands within the City of Wausau or associated municipalities. No land is to be acquired from a farm operation.
Natural Resources DNR	Y	Coordination with the DOT/DNR liaison is on-going. The DNR has provided a project letter for both the previous FONSI and this EA. The letters of August 11, 2000 and August 20, 2002 address the DNR's initial comments for the project. Both letters are provided in Exhibit 7. Coordination will continue until final concurrence on the plans and methods to minimize harm to the natural environment.
State Historical Society SHS	N	No historic structures identified to date. No coordination anticipated. No archaeological finds identified to date. No coordination anticipated.
Others:		

FEDERAL AGENCY		
Advisory Council on Historic Preservation ACHP	N	No issues identified to date. No coordination anticipated.
Corps of Engineers COE	N	The COE has been involved in initial mainline FONSI coordination since 1999. A field review of the Big Rib River floodplain forest was conducted in February 2002 with COE, the DNR, and project staff. The COE received the road project and stormwater coordination letters for this project, but does not officially comment on projects until Section 404 Permit or Pre-permit application meetings are conducted. They have provided verbal concurrence on project need and request ongoing avoidance and minimization efforts. Various coordination efforts will be necessary for coordination of the 7 year construction effort for the cumulative mainline and arterial projects. Conversation records are contained in the files and address conceptual design issues. The COE, USEPA, and DNR are encouraging minimization efforts and replacement of impacts on-site and in-kind to the extent possible. The COE has indicated that innovative or watershed approach mitigation can be considered by the COE. This may include components of water quality improvements, floodplain storage mitigation, and innovative approaches to address the wetland, floodplain and habitat impacts.
Environmental Protection Agency EPA	Y	The USEPA received the project coordination letter and has expressed basic concerns to project staff in a phone conversation and email that is provided in Exhibit 7. The USEPA will reserve detailed comments until the availability of the EA. The USEPA wants to encourage close coordination on plans and impacts in the Big Rib River corridor with the West Arterial project. Avoidance and minimization noted above in the USACE section also applies.
National Park Service NPS	N	No issues identified to date. No coordination anticipated.
Natural Resource Conservation Service NRCS	N	Sent project letter to NRCS District Conservationist as a courtesy copy in the event nearby farm operations or USDA program lands are identified. No land is to be acquired from a known farm operation. No coordination anticipated.
US Coast Guard USCG	N	No coordination anticipated. Coordination during Section 404 permitting will be evaluated.

US Fish & Wildlife Service USFWS:	N	The USFWS received the project coordination letter and has not expressed any concerns to date. The Bald Eagle is the only federally listed species known in the Wausau area. The previous FONSI and West arterial coordination indicates that because of the location and nature of the proposed project, the species would not be affected. Coordination for any federally listed species and/or coordination under the migratory Bird Treaty Act will be evaluated further in design.
Other(Identify)		

ENVIRONMENTAL FACTORS	EFFECTS Adverse	Benefit	None	NOT Applicable (Blacked out cells in this column require a check in at least one of the other columns.	COMMENTS
SOCIO-ECONOMIC FACTORS					
A. General Economics	☒	☒	☐		▪ There may be disruptions to business activity during construction. ▪ Several businesses require relocation. They will be relocated within the Wausau area. ▪ The economic viability of the area will be enhanced by more safe and efficient traffic operations. ▪ Access to local roads will be improved. ▪ Safety will be improved reducing economic loss due to loss of life, personal injury, and property damage. ▪ Improved bike and pedestrian facilities will promote tourism and recreational use of the facilities.
B. Community & Residential	☐	☒	☐	☐	▪ No residential relocations are required for the proposed action. ▪ Improved access to the local road system and nearby neighborhoods will allow for more efficient traffic movement to the commercial areas, hospital/insurance complex, and downtown Wausau. ▪ Access for emergency vehicles to respond to fires, accidents, and medical emergencies will be improved.
C. Economic Development and business	☒	☒	☐	☐	▪ There may be disruptions to business activity during construction. ▪ Several businesses will be relocated as a result of the proposed action. The overall improvements to the transportation system will enhance the economic viability of area. ▪ Reduced congestion and shorter travel times may promote economic activity in the interchange area. ▪ Improved access to the area and local road system could promote business recruitment to the Wausau area. ▪ Reconfiguring the interchange has provided additional land that could be commercially developed.
D. Agriculture	☐	☒	☐	☐	▪ There are no agricultural lands affected by the proposed action. ▪ The improved traffic operations will allow for farmers to more efficiently move their produce from farm to market thus reducing the farmer's costs.
E. Environmental Justice	☐	☐	☒	☐	▪ There will be no disproportionately high and adverse affects to minority or low-income populations as a result of the proposed action.
NATURAL ENVIRONMENT FACTORS					
F. Wetlands	☒	☐	☐	☐	▪ Wetland impacts based on conceptual design total approximately 11.24 acres. This project involves enlargement of an existing linear corridor, at the Big Rib River floodplain corridor crossing. About half of the impacts are to wet meadow (M)areas along the lower slope or toe of slope of R/W areas or in roadside ditches. The STH29 West and Sherman Avenue ramp configuration will impact wooded swamp(WS/RPF), an old oxbow of the river, and other depressions on the east side of USH51. Impacts to the west side of USH51 in this area are to open water/RPE ditch areas from previous construction. ▪ Avoidance and minimization efforts will be maximized. Retaining walls, rustic guard rail, and other aesthetic structural or erosion control techniques will be used. Project staff and resource agency staff will discuss and employ minimization efforts and replacement of impacts on-site and in-kind to the extent possible to address the wetland, floodplain and habitat impacts. Stormwater and wetland mitigation plans are to address impacts and enhance functions and values of wetlands. See the

					Wetland Factor Sheet.
G. Streams & Floodplains	☒	☐	☐	☐	▪ Adverse impacts will occur to two DNR determined navigable waterways located within the project area. The first is the Big Rib River corridor which consists of lowland hardwood forest, coniferous swamps, and shrub-scrub habitat among the oxbows and channels of the Big Rib River. The river is a warm water fishery and backwater areas provide habitat for fish spawning and invertebrate production. The second waterway is an urban streamthread which originates somewhere northwest of Sherman and 27th Avenue and meanders through open channels and underground pipes to an outlet into the Big Rib River floodplain southeast of Sherman and USH51. The DNR and local municipalities have been involved in recent channel improvements to this waterway. This channel may contain Springs, has a forage fish habitat , includes in-channel detention, and provides a narrow natural riparian corridor in some stretches. ▪ Temporary impacts can be addressed for both areas. . The long-term impacts to the urban streamthread can be minimized or enhanced during design. Quantitive adverse impacts to the Big Rib River will be minor because the proposed action would replace the existing four-lane bridge with a similar, six-lane, multi-span structure. The crossing is an expansion of an existing longitudinal crossing within the 100-year floodplain (elev. 1196 MSL). Backwater effects are less than the 0.1 foot difference requiring mitigative actions. Long term habitat alteration and other effects to the Rib River Corridor will require mitigation. See the Streams and Floodplains Factor Sheets.
H. Lakes or Other Open Water	☐	☐	☐	☒	▪ Not applicable. The riverine setting of the Big Rib River is described above.
I. Upland Habitat	☐	☐	☒	☐	▪ Impacts are minor to negligible. Predominate future roadway areas consist of commercial and vacant urban land covered with agronomic and lawn species. Some upland habitat is provided on upslope R/W areas and near sandbar or upland areas near the Bib Rib River.
J. Erosion Control	☒	☒	☐	☐	▪ Standard erosion control measures will minimize adverse effects to the urban area. ▪ Wetland and aquatic areas of the Big Rib River will require special attention to erosion and sediment control. A second row of silt fence is anticipated to be installed prior to May 1 in this area to minimize adverse effects to turtle populations. The fence would provide a wood turtle and other turtle , amphibian, and reptile exclusion area. ▪ Contractors are responsible for erosion and sediment control according to the standards of Trans 401. The requirements of Construction Site Best Management Practices and the DOT/DNR Cooperative Agreement will also be required.
K. Storm Water management	☒	☒	☐	☐	▪ After construction of the planned improvement there will be no-net change in impervious area . ▪ A detailed Stormwater Management Plan is being developed for the project. Recommendations for the wetland and stormwater observations noted in Exhibit 8 will be addressed by project design teams and as discussed in Stormwater and Erosion Control Sections. The requirements of NR151 and Construction Site Best Management Practices will also be required
PHYSICAL ENVIRONMENT FACTORS					
L. Air Quality	☐	☐	☒		▪ This project is exempt from permit requirements under Wisconsin Administrative Code – Chapter NR 411. See factor sheets for explanation.
M. Construction Stage Sound Quality	☐	☐	☐		▪ To reduce the potential impact of Construction Noise, the special provisions for this project will require that motorized equipment shall be operated in compliance with all applicable local, state and federal laws and regulations relating to noise levels permissible within and adjacent to the project construction site. At a minimum, the special provisions will require that motorized construction equipment shall not be operated between 10 PM and 6 AM without prior written approval of the project engineer. All motorized construction equipment will be required to have mufflers constructed in accordance with the equipment manufacturer's specifications or a system of equivalent noise reducing capacity. It will also be required that mufflers and exhaust systems be maintained in good working order, free from leaks or holes.
N. Traffic Noise	☒	☐	☐		▪ A traffic noise analysis was performed on the project area. Impacts were identified per Wisconsin Administrative Code – Chapter TRANS 405.

					Analysis showed that noise barriers were not cost effective. See factor sheet for impacts.
CULTURAL ENVIRONMENTAL FACTORS					
O. Section, 4(f)and , 6(f).)	☐	☐	☐	☒	▪ There are no 4(f) or 6(f) lands within the project area. Marathon County is to acquire floodplain areas southwest of the USH51 Sherman Street area as environmental mitigation for the McCleary Bridge project. A Memorandum of Agreement and with the DNR and DOT and coordination with the West Arterial project indicate that some surplus lands will be released to the State for the West Arterial project.
P. Historic Resources	☐	☐	☒	☐	▪ A Section 106 form was completed for Project I.D. 1166-00-00. The area researched for that document includes the area of potential effect for the proposed action under this EA. No sites were found in the area of potential effect. The Section 106 form is attached as Exhibit 9.
Q. Archaeological Resources	☐	☐	☐	☐	▪ A Section 106 form was completed for Project I.D. 1166-00-00. The area researched for that document includes the area of potential effect for the proposed action under this EA. No sites were found in the area of potential effect. The Section 106 form is attached as Exhibit 9.
R. Hazardous Substances or UST's	☒	☒	☐	☐	▪ Eight sites along the project have been identified as having potential for contamination within the existing R/W. ▪ Potential beneficial reuse of a contaminated site is possible. Redevelopment of an old landfill within the STH29 West ramp site is pending relocation coordination.
S. Aesthetics	☒	☐	☐		▪ The current view sheds would be adversely affected because of the need to elevate the STH29 fly-over ramps about 25 feet above existing profile. Other roads will also be elevated with most in the local commercial district of the STH29 West Interchange. Natural environment areas will not be substantially altered other than the widened USH51 Big Rib River crossing corridor. ▪ The intersection north of the Rib River is an important consideration of aesthetics and design, as is the STH52 off-ramp which serves as the "gateway" to the City. Natural and traditional landscaping will be considered to restore an aesthetically pleasing landscape. Structural aesthetics will also be evaluated during design
T. Coastal Zone	☐	☐	☐	☒	▪ There are no Special Coastal Areas within the limits of the proposed improvements.
U. Other	☐	☐	☐	☒	▪ None

ENVIRONMENTAL COST MATRIX
Transportation Improvements

Environmental Issue	Unit Measure	Alternatives/Sections					
		No Build	Alt. B	Alt. C (VP/VE 4R)			
Project Length	Mi (Km)		3.3 (5.3)	3.3 (5.3)			
Cost $							
Construction	Million $		$83.9	$82.9			
Real Estate	Million $		$9.2	$26.5			
Total	Million $		$93.1	$109.4			
Land Conversions							
Total Area Converted to R/W	Acres (Hectares)		17.0	35.2			
Wetland Area Converted to R/W	Acres (Hectares)		6.4	11.24			
Upland Area Converted to R/W	Acres (Hectares)		10.6	19.4			
Other Area Converted to R/W	Acres (Hectares)		N/A	N/A			
Real Estate							
Number of Farms Affected	Number		0	0			
Total Area From Farm Operations Required	Acres (Hectares)		0 (0)	0 (0)			
AIS Required?	Yes/No		No	No			
Farmland Rating	Score		N/A	N/A			
Total Buildings Required	Number		9	7			
Housing Units Required	Number		5	0			
Commercial Units Required	Number		3	6			
Other Buildings or Structures Required	Number (Type)		1 (San. Sewer Pump Station)	1 (San. Sewer Pump Station)			
Environmental Issues							
Flood Plain	Yes/No		Yes	Yes			
Stream Crossings	Number		2	2			
Endangered Species	Yes/No		No	No/coordinate			
Historic Properties	Number		No	No			
Archeological Sites	Number		No	No			
106 MOA Required?	Yes/No		No	No			
4(f) Evaluation Required?	Yes/No		No	No			
Environ Justice At Issue?	Yes/No		No	No			
Air Quality Permit?	Yes/No		No	No			
Design Year Noise Sensitive Receptors No Impact Impacted Exceed dBA Levels	 Number Number Number		 42 114 114	 78 24 24			
Contaminated Sites	Number		4	8			

8) Describe how the project development process complied with Executive Order 12898 on Environmental Justice. (EO 12898 requires agencies to achieve environmental justice by identifying and addressing disproportionately high and adverse human health and environmental effects on minority populations and low-income populations, including the interrelated social and economic effects. Include those covered by the Americans with Disabilities Act and the Age Discriminate)

a) Identify sources of data used to determine presence of minority populations and low-income populations.

☒ **Windshield Survey** ☐ **Survey Questionnaire** ☐ **Door to door**

☒ **WisDOT Real Estate** ☒ **US Census Data**

☐ **Real Estate Company**
Identify Real Estate Company

☐ **Human resource Agency**
Identify agency

☐ **Official Plan**
Identify Plan, Approval Authority, and Date of Approval

b) Indicate whether a minority population or a low-income population, including the elderly and the disabled, is in the project's area of influence.

i) The requirements of EO 12898 are met if both "No" boxes are checked below

☐ **No minority population in project's area of influence.**

☒ **No low-income population in project's area of influence**

ii) If either or both of the "Yes" boxes are checked, item c below must be completed

☒ **Yes, a minority population is within the project's area of influence**

☐ **Yes, a low-income population is within project's area of influence.**

c) How was information on the proposed action communicated to the minority and/or low- income population(s)? Check all that apply.

☐ **Advertising** ☐ **Brochures** ☒ **Newsletter** ☒ **Notices** ☐ **Utility Bill Stuffers**

☐ **E-mail** ☐ **Public Service Announcements** ☐ **Direct Mailings** ☐ **Key Person**

☒ **Other (Identify)** Public informational meetings were held on July 26, 2001 and January 17, 2002 to inform the public about the project. There is a public website for the project. See www.dot.state.wi.us/dtd/hdist4/5129-index.htm.

d) Identify how input from the minority population and/or low-income population obtained? Check al that apply.

☐ **Mailed Survey** ☐ **Door-to-door interview** ☐ **Focus Group Research** ☒ **Public Meeting** ☐ **Public Hearing**

☐ **Key Person Interview** ☐ **Targeted Small Group Informational Meeting**

☐ **Targeted Workshop/Conference** ☐ **Other (Identify)**

e) Indicate any special provisions made to encourage participation from the minority population and/or low-income population(s)

☐ **Interpreter** ☐ **Listening Aids** ☒ **Accessibility for Elderly and Disabled** ☐ **Transportation Provided**

☐ **Child Care Provided** ☐ **Sign Language** ☐ **Other (Identify)**

9) Briefly summarize the status and results of public involvement. Briefly describe how the public involvement process complied with EO 12898 on Environmental Justice.

This project has utilized an extensive public involvement process. Every attempt has been made to include all persons in the project area regardless of income, race, religion, sex, or disability. All public meetings were held at the River Building in Wausau which is handicap accessible.

Several public informational meetings have been held as part of the overall improvements to I-39/USH 51/STH 29 corridor. These meetings have spanned several years. Two public informational meetings were held as part of this project to specifically discuss the USH 51/STH 29 West Interchange area. The first meeting was held on July 26, 2001 at the River Building in Wausau. Approximately 190 people attended this meeting. The meeting was an open house format and a formal presentation was given. Representatives from WisDOT, the CMT, consulting engineers, and local government were in attendance to answer questions.

A second public informational meeting was held on January 31, 2002 at the River Building. Approximately 158 people attended this meeting. This meeting was an open house format and formal presentations were given to describe the VP/VE process and the alternatives being considered. Representatives from WisDOT, the CMT, consulting engineers, and local government were in attendance to answer questions.

On May 17, 2002, Alternative 4R was shown to the public as the preferred alternative through a press release from WisDOT.

In addition to the public informational meetings and press releases, several newspaper articles have been written on the interchange. Editorial letters have been written to and published in the Wausau Daily Herald.

WisDOT has a website set up for this project. Several people have e-mailed comments to the project team.

a) Identify groups(e.g., elderly, handicapped), minority populations and low-income populations that participated in the public involvement process. This would include any organizations and special interest groups.

Some members of the minority population attended the public informational meetings.

b) Describe, briefly, the issues, if any, identified by any groups, minority populations and/or low-income populations during the public involvement process.

No issues were identified.

c) Briefly describe how the issues identified above were addressed. Include a discussion of those that were avoided as well as those that were minimized and those that are to be mitigated. Include a brief discussion of proposed mitigation, if any.

Because no issues were identified, there are none to address.

10) Briefly describe the results of coordination with local units of government.

a) Identify local units of government contacted and provide the date coordination was initiated.

Government	Date of Coordination m/d/yyyy
Town of Rib Mountain	Ongoing
Town of Stettin	Ongoing
City of Wausau	Ongoing
Marathon County	Ongoing

b) Describe, briefly, the issues, if any, identified by local units of government during the public involvement process.
The Town of Stettin has expressed concern over losing some it's tax base because of the relocation of some large retail businesses. Efforts are being made to relocate these businesses within the Town of Stettin. They have agreed that the project is needed. Other local units of government are in favor of the project.

c) Briefly describe how the issues identified above were addressed. Include a discussion of those that were avoided as well as those that were minimized and those that are to be mitigated. Include a brief discussion of proposed mitigation, if any.
At least one large retail business is looking at relocating in the Town of Stettin. They will do so if a suitable site can be found. The reconfiguration of the interchange has also made land available for potential relocations of smaller businesses and for potential future development of commercial sites to add businesses to the tax base for the Town of Stettin.

TRAFFIC SUMMARY

	ALTERNATE				
	SEGMENT TERMINI	USH 51 - Mallard Lane to STH 29	USH 51 - STH 29 to West Bridge Street	STH 29 – 44th Avenue to USH 51	
TRAFFIC VOLUMES Existing	**ADT Yr.** 1998	53,300 (51,103) [60,554]	29,200 (27,900) [38,800]	19,300 ( ) [24,400]	
Const. Year	**ADT Yr.** 2010	69,290 (78,800) [74,460]	37,960 (40,800) [48,669]	25,090 ( ) [28,775]	
Const. Plus 10 Yr.	**ADT Yr.** 2020	82,615 (93,200) [85,580]	45,260 (46,300) [56,789]	29,915 ( ) [32,525]	
Design Year	**ADT Yr.** 2030	95,940 (114,200) [96,129]	52,560 (55,000) [64,782]	34,740 ( ) [36,402]	
	DHV Yr. 2030	8,635 (10,280) [8,650]	4,730 (4,950) [5,830]	3,130 ( ) [3,280]	
TRAFFIC FACTORS	**K (30 & 100)**	K30 = 10.7% K100 = 9.9%	K30 = 10.7% K100 = 9.9%	K30 = 10.7% K100 = 9.9%	
	D (%)	58 – 42	58 – 42	58 – 42	
Design Year	**T (% of ADT)**	8.1 %	8.1 %	8.1 %	
	T (% of DHV)	6.9 %	6.9 %	6.9 %	
	Level of Service				
SPEEDS Existing	**Posted**	55 mph	55 mph	55 mph	
Design Year	**Posted**	55 mph	55 mph	55 mph	
	Project Design Speed	70 mph	70 mph	70 mph	
OTHER (specify)	**P (% of ADT)**	12.2 %	12.2 %	12.2 %	
	K (% OF ADT)				

= No Build
( ) = Alternative B
[ ] = Alternative C (VP/VE 4R)

ADT = Average Daily Traffic **DHV = Design Hourly Volume**
$K_{100/200}$ or % = K_{100} = Rural, K_{200} = Urban, % = ADT in DHV **D = % DHV in predominate direction of travel**
T = Trucks **P = % ADT in Peak hour**
K_8 = % ADT occurring in the average of the 8 highest consecutive hours of traffic on an average day. (Only required when a carbon monoxide analysis must be performed per Wisconsin Administrative Code - Chapter NR 411.)

ENVIRONMENTAL ISSUES

Indicate whether the issue listed below is a concern for the proposed action or alternative. If the issue is a concern, explain how it is to be addressed or where it is addressed in this environmental document.

1) Stimulation of secondary environmental effects.

☒ **No - Substantial secondary environmental effects will not be stimulated.**

☐ **Yes - Stimulation of substantial secondary environmental effects will occur. Explain or indicate where addressed.**

2) Creation of a new environmental effect.

☒ **No - A new environmental effect will not be created.**

The project is primarily on existing alignment. Therefore, the impacts already exist to some extent.

☐ **Yes - The project will create a new environmental effect. Explain or indicate where addressed.**

3) Impacts on geographically scarce resources.

☐ **No - Geographically scarce resources will not be impacted.**

☒ **Yes - Impacts on geographically scarce resources will occur. Explain or indicate where addressed.**

High quality floodplain forests, old river oxbows and other wetlands and habitat of the Big Rib River will be affected by the proposed action. Design considerations such as retaining walls and steepened slopes have been taken into account to minimize these impacts. Coordination efforts with the USACE and DNR are ongoing to address this issue.

4) Precedent-setting nature of the proposed action.

☒ **No - The proposed project does not have a precedent-setting nature.**

☐ **Yes - The proposed project has a precedent-setting nature. Explain or indicate where addressed.**

5) The degree of controversy associated with the proposed action.

☒ **No - The proposed action is not controversial or the level of controversy is low.**

☐ **Yes - The project has a high degree of controversy. Explain or indicate where addressed.**

6) Conflicts with official agency plans or local, state, or national policies, including conflicts resulting from potential effects of transportation on land use and land use on transportation demand.

☒ **No - No conflicts with any plans, policies, or land uses will result.**

☐ **Yes - Conflicts with plans, policies or land uses will result. Explain or indicate where addressed.**

7) Cumulative environmental impacts of repeated actions of the type proposed.

☐ **No - The proposed action will not contribute to cumulative environmental impacts of repeated actions.**

☒ **Yes - Cumulative environmental impacts will result from repeated actions of the type proposed. Explain or indicate where addressed.**

WisDOT is currently working on six individual projects in the I-39/USH 51/STH 29 corridor. These projects have individual purpose and need but are related to each other in how they address the transportation needs of the area. These projects and their associated environmental impacts are summarized in the "Highway 51 Corridor Improvement: Environmental Cap Document Summary" that was submitted to the regulatory agencies and WisDOT in July 2002. This document discusses the cumulative impacts of these projects.

The width of the Big Rib River and the fact that the project is an expansion of an existing longitudinal crossing limits the cumulative environmental effect of the project. Additionally, all aspects of the design and the natural environment are addressed within the various traffic, environmental, stormwater, noise, and design reports completed or pending for the project and the USH51 corridor.

ENVIRONMENTAL COMMITMENTS

Identify and describe any commitments made to protect the environment. Indicate when the commitment should be implemented and who in WisDOT would have jurisdiction to assure fulfillment for each commitment.

A. General Economics	No Commitments
B. Community & Residential	No Commitments
C. Commercial & Industrial	No Commitments
D. Agriculture	No Commitments
E. Environmental Justice	No Commitments
F. Wetlands	Wetland impacts are to be avoided and minimized as a requirement of the DOT/DNR cooperative agreement. Coordination with the USACE, DNR, and USEPA, and DNR also encouraged minimization efforts and requested that mitigation and replacement of impacts occur on-site and in-kind to the extent possible. See detailed information provided in the coordination section. The project will seek to use traditional and innovative approaches to replace the functions and values of wetlands lost or impacted by construction. The DOT environmental coordinator and project staff have jurisdiction to assure fulfillment of the commitment.
G. Streams & Floodplains	No defined commitment. Bridge hydraulic backwater calculations for the Big Rib River indicate that upstream floodplain conditions will be unchanged by the new USH51 structure fill or the change is less than 0.1 foot and does not require upstream landowner notification. The USACE and other resource agencies indicate that they would like the qualitative (habitat) and quantitative (floodplain storage) components of the Rib River floodplain considered in wetland mitigation options. The note relates to the urban streamthread which originates somewhere northwest of Sherman and 27th Avenue and meanders through open channels and underground pipes to an outlet into the Big Rib River floodplain southeast of Sherman and USH51. The previous reconstruction addressed quantitative and qualitative components of the channel replacement. It was not a typical ditch excavation or maintenance issue. The channel reconstruction and the associated stormwater detention basins had both hard and soft armor erosion control components required by resource agencies. The existing conditions and proposed replacements should be reviewed early in design by resource agency staff (DNR/USACE). The DOT environmental coordinator and project staff have jurisdiction to assure fulfillment of the commitment.
H. Lakes or Other Open Water	None identified. See above for protection of the riverine environments in the project area.
I. Upland Habitat	None
J. Erosion Control	Contractors are responsible for erosion and sediment control according to the standards of Trans 401. The requirements of Construction Site Best Management Practices and the procedures and guidelines of the DOT/DNR cooperative agreement are also to be followed by the contractor and project staff. The DNR project letter of August 20, 2002, requests that a row of silt fence be installed prior to May 1 in the Big Rib River construction area to exclude state threatened wood turtles from the construction zone. Details of this and other DNR requested measures will be completed or evaluated according to the DOT/DNR cooperative agreement.
K. Storm Water management	Project design teams are to follow NR151 design requirements and should also refer to the Stormwater Management Plan developed for the project. Areas of stormwater Concern are provided in Exhibit 8. Wetland observations are also provided in the Exhibit.
L. Air Quality	The project is exempt from permit requirements per Wisconsin Administrative Code – Chapter NR 411
M. Construction Stage Sound Quality	To reduce the potential impact of Construction Noise, the special provisions for this project will require that motorized equipment shall be operated in compliance with all applicable local, state and federal laws and regulations relating to noise levels permissible within and

adjacent to the project construction site. At a minimum, the special provisions will require that motorized construction equipment shall not be operated between 10 PM and 6 AM without prior written approval of the project engineer. All motorized construction equipment will be required to have mufflers constructed in accordance with the equipment manufacturer's specifications or a system of equivalent noise reducing capacity. It will also be required that mufflers and exhaust systems be maintained in good working order, free from leaks or holes. See the Air Quality Factor Sheet.

N. Traffic Noise

A traffic noise analysis was performed on the project area. Impacts were identified per Wisconsin Administrative Code – Chapter TRANS 405. The impacts are to the residential neighborhood located northeast of the USH 51/West Bridge Street interchange. Noise walls were modeled at this site. It was determined that walls are not an economical mitigation (cost is greater than $30,000 per dwelling).

O. Section, 4(f)and , 6(f).)

No Commitments

P. Historic Resources

No Commitments

Q. Archaeological Resources

No Commitments

R. Hazardous Substances or UST's

Pending. Phase 1 review completed. Requirements for responsible party cleanup, additional DOT investigations, and evaluation of potential acquisition areas is a responsibility of WisDOT District 4, Central Office BOE and it's consultants.

S. Aesthetics

No commitment. However, natural and salt-spray tolerant vegetation should be considered in the Rib River corridor. Natural or traditional landscaping will be considered to restore an aesthetically pleasing landscape. Structural aesthetics issues will be evaluated during design by individual design teams.

T. Coastal Zone

No Commitments

U. Other

No Commitments